

CMR1-005M
CMR1-01M

**SURFACE MOUNT SILICON
GENERAL PURPOSE RECTIFIERS
1.0 AMP, 50 AND 100 VOLT**



SMA CASE



www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMR1-005M and CMR1-01M 1.0 Amp surface mount silicon rectifiers are well constructed, highly reliable components designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications where small size is required. The SMA case occupies 30% less board space than the SMB case.

**MARKING CODES: CMR1-005M: C005M
CMR1-01M: C01M**

FEATURES:

- High reliability
- Glass passivated chip
- Special selections available

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL	CMR1-005M	CMR1-01M	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	V
DC Blocking Voltage	V_R	50	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	V
Average Forward Current ($T_L=100^\circ\text{C}$)	I_O		1.0	A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}		30	A
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150		$^\circ\text{C}$
Thermal Resistance	θ_{JL}	30		$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

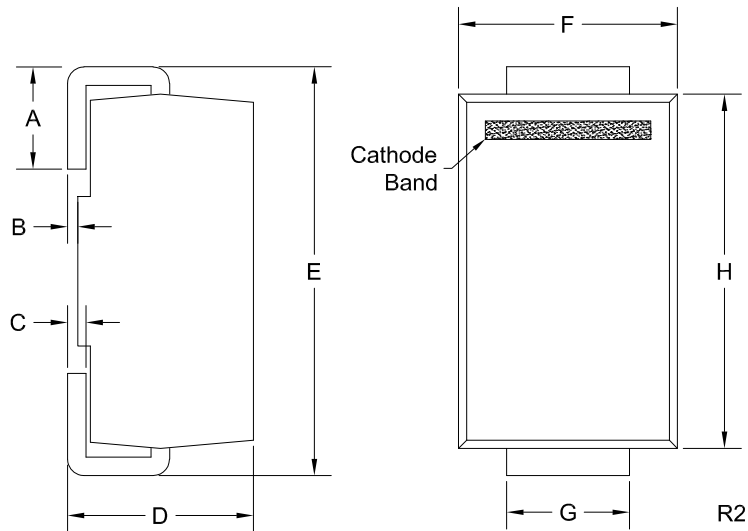
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	$V_R=\text{Rated } V_{RRM}$		5.0	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=125^\circ\text{C}$		50	μA
V_F	$I_F=1.0\text{A}$		1.1	V
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$	8.0		pF

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SMA CASE - MECHANICAL OUTLINE



Marking Codes:
 CMR1-005M: C005M
 CMR1-01M: C01M

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.004	0.008	0.10	0.20
C	0.006	0.012	0.15	0.30
D	0.078	0.103	1.98	2.62
E	0.188	0.220	4.78	5.59
F	0.090	0.115	2.29	2.92
G	0.050	0.070	1.27	1.78
H	0.157	0.181	3.99	4.60

SMA (REV: R2)

R3 (1-May 2015)

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SERVICES

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development/ Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

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R3 (1-May 2015)